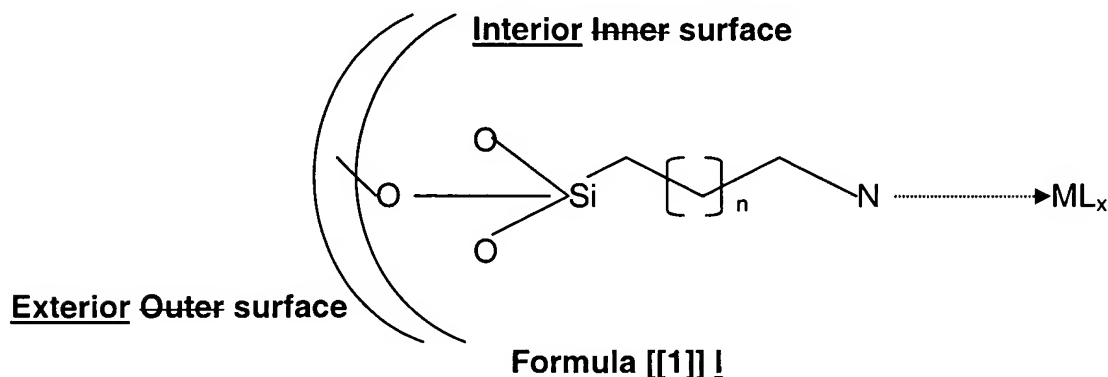


IN THE CLAIMS

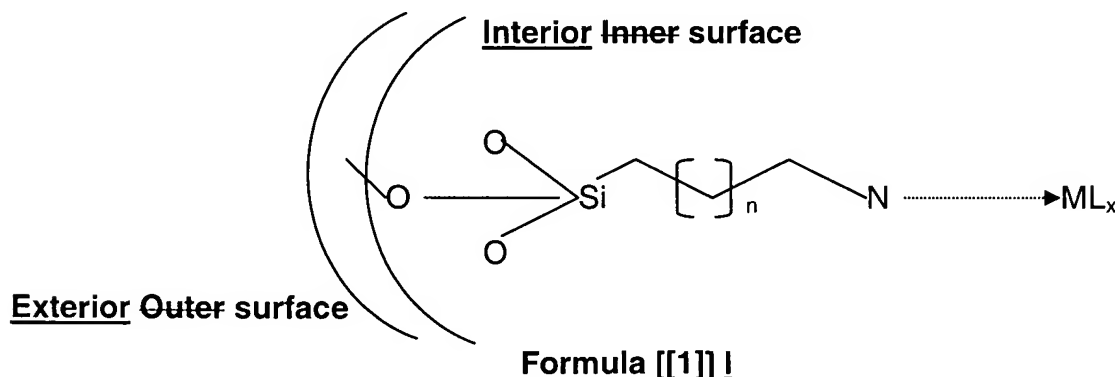
This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) An immobilized metal complex catalyst of the Formula I



wherein M is a Group VIII metal, n is an integer ~~with a value between~~ in the range from 2 and to 6, ML_x is an organometallic complex, and L_x is a phosphine ligand; wherein the complex is anchored to the interior of a solid matrix with exterior surface and interior surface comprising a microporous material selected from the group consisting of Zeolite Y, Zeolite B, and ZSM-5 or a meosporous material selected from the group consisting of MCM-41 and MCM-48.

2. (currently amended) A process for the preparation of an immobilized metal complex catalyst of Formula I

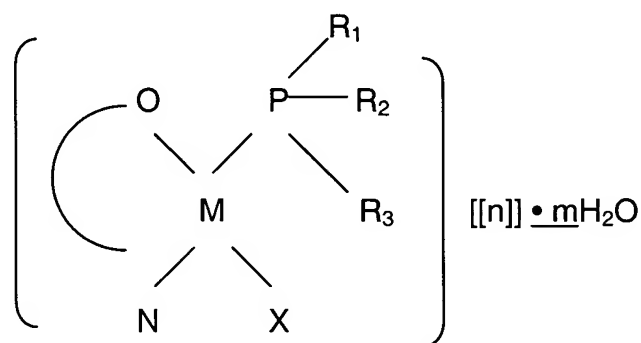


wherein M is a Group VIII metal, n is an integer ~~with a value between~~ in the range from 2 and to 6, ML_x is an organometallic complex, and L_x is a phosphine ligand; wherein the complex is anchored to the interior of a solid matrix comprising a microporous material

selected from the group consisting of Zeolite Y, Zeolite B, and ZSM-5 or a meoporous material selected from the group consisting of MCM-41 and MCM-48; the process comprising pretreating a solid matrix with $[[an]]$ exterior surface and interior surface, by blocking the exterior surface using a blocking agent in a solvent system leaving the interior surface unperturbed undisturbed; $[[,]]$

functionalising functionalizing the interior surface of the solid matrix with a functionalized silane having a general formula of $Z-(CH_2)_p-Si(OR)_qH_{3-q}$, wherein Z is a functional group selected from the group consisting of $-NH_2$, $-SH$, vinyl and allyl, p is an integer in the range from 2 to 6, OR is an alkoxy group, and q is an integer in the range from 1 to 3; $[[,]]$

followed by treating the functionalized matrix with a transition metal complex solution of formula Formula II



Formula II

wherein M is a Group VIII metal; \underline{R}_1 $[[R1]]$, \underline{R}_2 $[[R2]]$, and \underline{R}_3 $[[R3]]$ are substituents on the phosphine ligand and are selected from the group consisting of hydrogen, alkyl, aryl, arylalkyl, and arylalkyl cycloaromatic group; X is selected from the group consisting of aryl sulphonato, alkyl sulphonato, aryl carbonate, alkyl carbonate, and formato, and a halide selected from the group consisting of $[[C1]]$ Cl, Br, and I; N-O is a semilabile anionic chelating ligand containing ~~a N-donor and O-group~~ an N donor and O⁻ group; $1 < [[n]] \quad m < 10$; to ~~actually anchor~~ immobilize the complex to the interior of the solid matrix, to obtain the immobilized metal complex catalyst.

Claim 3 (canceled)

4. (currently amended) A process as claimed in claim 2 wherein the solid matrix is purely siliceous or is aluminated (containing aluminium in the matrix framework).

5. (currently amended) A process as claimed in claim 2 wherein the blocking agent ~~used for the blocking of the exterior surface~~ is selected from the group consisting of a dialkyl and a diaryl substituted dihalosilane having the general formula of R_2SiX_2 R_2SiX_2 , wherein R is ~~any an~~ an alkyl, aryl, or arylalkyl group ~~etc.~~, and X is a halogen atom selected from the group consisting of ~~[[Cl]]~~ Cl, Br, and I.

6. (currently amended) A process as claimed in claim 2 wherein ~~[[the]]~~ a solvent system used for the treatment of the matrix to block the exterior surfaces and subsequent functionalization is selected from the group consisting of dichloromethane, diethylether, dry ~~methonal~~ methanol, dry ethanol, cyclohexane, cyclopentane, hexane, pentane and octane.

Claim 7 (canceled)

8. (currently amended) A process as claimed in claim 2 wherein in the transition metal complex of Formula II, ~~above N-O is a semilabile anionic chelating ligand containing a N-donor and O-group~~ selected from the group consisting of 8-hydroxyquinoline, 2-hydroxypyridine, 2-(2-hydroxyethyl) pyridyl-2-carboxylate, piperidyl-2-carboxylate, quinoly-2-carboxylate, isoquinoly-1-carboxylate, and isoquinoly-3-carboxylates ~~and 1- $n \leq 10$~~ .

9. (original) A process as claimed in claim 8 wherein the semilabile anionic chelating ligand is pyridyl-2-carboxylate.

10. (currently amended) A process as claimed in claim 2 wherein in ~~formula~~ Formula II, M is Pd; R₁ ~~[[R1]]~~, R₂ ~~[[R2]]~~, and R₃ ~~[[R3]]~~ are phenyl; X is *p*-toluenesulphonato-~~(OTs⁻)~~, N-O is pyridyl-2-carboxylate and ~~[[n]]~~ m is 3.

11. (currently amended) A process as claimed in claim 2 wherein the anchoring of the metal complexes of ~~the general formula~~ Formula II is done in a solvent selected from the group consisting of methanol, ethanol, ~~Propanol~~ propanol, acetone and 2-butanone.

Claims 12-23 (canceled)